



SEQUENCE LISTING

<110> Evotec NeuroSciences GmbH

<120> Diagnostic and therapeutic use of the human HIF3alpha gene and proteins for neurodegenerative diseases

<130> 042637wo Me/FM

<140> PCT/EP2004/053573

<141> 2004-12-17

<160> 31

<170> PatentIn Ver. 2.1

<210> 1

<211> 289

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:HIF3a cDNA fragment

<400> 1

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ccagcctggg caacatggtg gaacttcgtc tctacaaaac atataaacat cagccaggca 180
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<211> 450

<212> PRT

<213> Homo sapiens

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His Pro Cys Asp Gln Glu Glu Leu Gln Asp Ala Leu Thr Pro Gln Gln
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Thr Leu Ser Arg Arg Lys Val Glu Ala Pro Thr Glu Arg Cys Phe Ser
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 Leu Lys
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 Arg Met His Arg Leu Cys Ala Ala Gly Glu Trp Asn Gln Val Gly Ala
 65 70 75 80
 Gly Gly Glu Pro Leu Asp Ala Cys Tyr Leu Lys Ala Leu Glu Gly Phe
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 195 200 205

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 225 230 235 240
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 Ser Ala Tyr Glu Tyr Ile His Ala Leu Asp Ser Asp Ala Val Ser Lys
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 <212> PRT
 <213> Homo sapiens

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 Ala His Leu Asp Lys Ala Ser Ile Met Arg Leu Thr Ile Ser Tyr Leu
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 Gly Gly Glu Pro Leu Asp Ala Cys Tyr Leu Lys Ala Leu Glu Gly Phe
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Lys Arg Ser Pro Ser Pro Glu His Glu Asn Phe Leu Leu Phe Pro Leu		
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 <212> PRT
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35 40 45

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Lys	Ser	Thr	Leu	Thr	Ser	Arg	Gly	Arg	Thr	Leu	Asn	Leu	Lys	Ala	Ala	115	120	125	
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Pro	Gln	Ser	Glu	Ser	Ile	Val	Cys	Val	His	Phe	Leu	Ile	Ser	Gln	Val	275	280	285	
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Pro	Gly	Asp	Ser	Leu	Asp	Thr	Pro	Gly	Pro	Arg	Ile	Leu	Ala	Phe	Leu	325	330	335	
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Gln Ser Pro Leu Ser Ala Asp Leu Pro Asp Glu Leu Pro Val Gly Thr
385 390 395 400
Glu Asn Val His Arg Leu Phe Thr Ser Gly Lys Asp Thr Glu Ala Val
405 410 415
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420 425 430
Met Leu Ala Pro Tyr Ile Ser Met Asp Asp Asp Phe Gln Leu Asn Ala
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Ser Glu Gln Leu Pro Arg Ala Tyr His Arg Pro Leu Gly Ala Val Pro
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Arg Pro Arg Ala Arg Ser Phe His Gly Leu Ser Pro Pro Ala Leu Glu
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485 490 495
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Arg Lys Arg Thr Leu Ala Gln Ser Ser Glu Asp Glu Asp Glu Gly Val
515 520 525
Glu Leu Leu Gly Val Arg Pro Pro Lys Arg Ser Pro Ser Pro Glu His
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Glu Asn Phe Leu Leu Phe Pro Leu Ser Leu Ser Phe Leu Leu Thr Gly
545 550 555 560
Gly Pro Ala Pro Gly Ser Leu Gln Asp Pro Thr Glu Leu Thr Gln Phe
565 570 575
Leu Leu Ser Val Leu Ser Phe Pro Ile Leu Asp Pro Tyr Pro Leu Gly
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Cys Ala Ala Pro Gly Leu His Ala Ser Pro Phe Ser Leu Pro Thr Ile
595 600 605
Ser Val Pro Gln Asn Pro Leu His Phe Pro Pro Gln Pro Ser Arg His
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<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:HIF3a cDNA of
splice variant 1

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<212> DNA
<213> Artificial Sequence

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<223> Description of Artificial Sequence:HIF3alpha cDNA
of splice variant 2

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tcccagtact	ttgggaagcc	aagggaaggag	gatgactaga	gcctctgagg	tgaagaccag	2160
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<211> 2082

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:HIF3alpha cDNA
of splice variant 3

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<211> 2595

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:HIF3alpha cDNA
of splice variant 5

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<210> 10

<211> 23

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:primer for
HIF3a splice variant 1

<400> 10

gggctcaagt gatcctccta ctt

23

<210> 11

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:primer for
HIF3a splice variant 1

<400> 11

catgatggca catagctgca gt

22

<210> 12

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:primer for

HIF3a splice variant 2

<400> 12
tttgcgtgaa cctctgctta ag 22

<210> 13
<211> 18
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer for
HIF3a splice variant 2

<400> 13
caccatgccca ggccaaat 18

<210> 14
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer for
HIF3a splice variant 3

<400> 14
tctctggccc tcattaccta gct 23

<210> 15
<211> 21
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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer for
HIF3a splice variant 3

<400> 15
ctgtatgacc ctcaaccagc c 21

<210> 16
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer for
HIF3a splice variant 5

<400> 16
actcttggtc tcccacagga aa 22

<210> 17
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 <210> 18
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 <223> Description of Artificial Sequence:primer for the
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 <400> 18
 actgaagcac tacgggcctg 20

 <210> 19
 <211> 19
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:primer for the
 cyclophilin B gene

 <400> 19
 agccgttggt gtctttgcc 19

 <210> 20
 <211> 20
 <212> DNA
 <213> Artificial Sequence

 <220>
 <223> Description of Artificial Sequence:primer for the
 gene of the ribosomal protein S9

 <400> 20
 ggtcaaattt accctggcca 20

 <210> 21
 <211> 22
 <212> DNA
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<220>
 <223> Description of Artificial Sequence:primer for the
 gene of the ribosomal protein S9

<400> 21
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<210> 22
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 <212> DNA
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<220>
 <223> Description of Artificial Sequence:primer for the
 beta-actin gene

<400> 22
 tggaacggtg aaggtgaca 19

<210> 23
 <211> 19
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence:primer for the
 beta-actin gene

<400> 23
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<210> 24
 <211> 20
 <212> DNA
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<220>
 <223> Description of Artificial Sequence:primer for the
 GAPDH gene

<400> 24
 cgtcatgggt gtgaaccatg 20

<210> 25
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<220>
 <223> Description of Artificial Sequence:primer for the
 GAPDH gene

<400> 25
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<210> 26
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer for the
transferrin receptor gene

<400> 26
gtcgtctggtc agttcgtgat t 21

<210> 27
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:primer for the
transferrin receptor gene

<400> 27
agcagttggc tgttgtacct ctc 23

<210> 28
<211> 1353
<212> DNA
<213> Homo sapiens

<400> 28
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 <213> Homo sapiens

<400> 29

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<210> 30
 <211> 1899
 <212> DNA
 <213> Homo sapiens

<400> 30

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<210> 31

<211> 1947

<212> DNA

<213> Homo sapiens

<400> 31

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